

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number
WO 2005/011607 A3

- (51) International Patent Classification⁷: **A61K 38/00**,
C07K 2/00, 4/00, 5/00, 7/00, 14/00, 16/00, 17/00
- (21) International Application Number:
PCT/US2004/024888
- (22) International Filing Date: 2 August 2004 (02.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/491,752 1 August 2003 (01.08.2003) US
- (71) Applicant (for all designated States except US):
SMITHKLINE BEECHAM CORPORATION
[US/US]; One Franklin Plaza, Philadelphia, Pennsylv-
ania 19101 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SPECTOR, Neil**,
Lee [US/US]; GlaxoSmithKline, Five Moore Drive, PO
Box 13398, Research Triangle Park, NC 27709 (US). **XIA**,
Wenle [US/US]; GlaxoSmithKline, Five Moore Drive, PO
Box 13398, Research Triangle Park, NC 27709 (US).
- (74) Agents: **CAMPEN, Virginia, C.** et al.; GlaxoSmithKline,
Five Moore Drive, PO Box 13398, Research Triangle Park,
NC 27709 (US).
- (81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.
- (84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
21 July 2005
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: TREATMENT OF CANCERS EXPRESSING P95 ERBB2

(57) Abstract: The truncated ErbB2 receptor (p95ErbB2) is shown to differ from the full-length ErbB2 receptor in its association with other ErbB receptors. The truncated receptor preferentially associated with ErbB3, whereas full length ErbB2 heterodimerizes with either EGFR or ErbB3. Consistent with p95ErbB2 heterodimerization with ErbB3, it is shown that heregulin (an ErbB3 ligand) stimulates p95ErbB2 phosphorylation in breast cancer cell lines. Described herein are methods of identifying patients suitable for treatment with a p95ErbB2 inhibitor, and methods of treating such patients.

WO 2005/011607 A3